PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	**FOR FURTHER ACTION**	see Form PCT/ISA/220 as well as, where applicable, Item 5 below.
227-03980		
International application No.	International filing date *(day/month/year)*	(Earliest) Priority Date *(day/month/year)*
PCT/IL2004/000289	29/03/2004	01/04/2003
Applicant		
GLUCON INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

[X] It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**
   a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
      [ ] The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
   b. [ ] With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. [ ] **Certain claims were found unsearchable** (See Box II).

3. [ ] **Unity of invention is lacking** (see Box III).

4. With regard to the **title,**
   [X] the text is approved as submitted by the applicant.
   [ ] the text has been established by this Authority to read as follows:

5. With regard to the **abstract,**
   [ ] the text is approved as submitted by the applicant.
   [X] the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings,**
   a. the figure of the **drawings** to be published with the abstract is Figure No. 1
      [X] as suggested by the applicant.
      [ ] as selected by this Authority, because the applicant failed to suggest a figure.
      [ ] as selected by this Authority, because this figure better characterizes the invention.
   b. [ ] none of the figures is to be published with the abstract.

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International application No.
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Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

Apparatus (20, 100) for assaying a target analyte in a localized tissue region (22) that may include the target and other analytes comprising: a light source (34, 104) that illuminates the region with light at each of a plurality of wavelengths at which light is absorbed and/or scattered by tissue in the region a signal generator (40) that generates signals responsive to intensity of the light from the light source (34, 104) at different locations in the localized region (22); and a controller (32, 102) that: receives the generated signals; processes the signals to determine an extinction coefficient for light in the localized region at each wavelength; and determines the concentration of the target analyte responsive to a solution of a set of simultaneous equations having as unknown variables concentrations of a plurality of analytes in the region (22), one of which is the target analyte, wherein each equation in the set expresses a relatioship between the extinction coefficient, the absorption coefficient and/or the reduced scattering coefficient for light at a different one of the plurality of wavelengths.

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International Application No
PCT/IL2004/000289

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61B5/00 G01N21/17

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61B G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 6 405 069 B1 (KARABUTOV ALEXANDER A ET AL) 11 June 2002 (2002-06-11) the whole document -----	1-7,9, 14-17, 19-23,28 8,10-13, 18,24-27
X	US 6 498 942 B1 (ESENALIEV RINAT O ET AL) 24 December 2002 (2002-12-24) column 3, line 14 - column 5, line 24 column 7, line 65 - column 8, line 9 column 10, line 3 - column 11, line 9 ----- -/--	1-7,9, 15-17, 19-23

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
17 August 2004	31/08/2004

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Lohmann, S

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Form PCT/ISA/210 (second sheet) (January 2004)

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	MOURANT J R ET AL: "Mechanisms of light scattering from biological cells relevant to noninvasive optical-tissue diagnostics" APPL. OPT. (USA), APPLIED OPTICS, 1 JUNE 1998, OPT. SOC. AMERICA, USA, vol. 37, no. 16, 1 June 1998 (1998-06-01), - 1 June 1998 (1998-06-01) pages 3586-3593, XP001182699 ISSN: 0003-6935 cited in the application paragraph '0003!	8,24
Y	ESENALIEV R O ET AL: "NONINVASIVE MONITORING OF GLUCOSE CONCENTRATION WITH OPTICAL COHERENCE TUMOGRAPHY" OPTICS LETTERS, OPTICAL SOCIETY OF AMERICA, WASHINGTON, US, vol. 26, no. 13, 1 July 2001 (2001-07-01), pages 992-994, XP001110430 ISSN: 0146-9592 page 992	10,18
Y	WO 02/15776 A (BEN AMI UDI ; NAGAR RON (IL); PESACH BENNY (IL); GLUCON INC (US)) 28 February 2002 (2002-02-28) cited in the application page 2, line 20 - page 4, line 10	11,13, 25,27
Y	OBERHEIDE U ET AL: "Two-dimensional detection of optoacoustic stress transients" PROC. SPIE - INT. SOC. OPT. ENG. (USA), PROCEEDINGS OF THE SPIE - THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING, 2002, SPIE-INT. SOC. OPT. ENG, USA, vol. 4618, 2002, pages 99-105, XP002292756 ISSN: 0277-786X paragraphs '0001!, '03.3!	12,26

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Information on patent family members

International Application No
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